



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,379	08/19/2003	Michael J. Thompson		3608

7590 03/03/2005

COOK ALEX McFARRON MANZO CUMMINGS & MEHLER, LTD.
200 West Adams Street
Suite 2850
Chicago, IL 60606

EXAMINER

GARLAND, STEVEN R

ART UNIT	PAPER NUMBER
----------	--------------

2125

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,379

Applicant(s)

THOMPSON, MICHAEL J.

Examiner

Steven R Garland

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2003 and 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 depends on nonexistent claim 11 and is the claim is incomplete.

2. Remarks: it is assumed applicant intended claim 7 to be dependent on claim 1.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1- 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barrick " Distributed data acquisition system for substation bus protection and monitoring" in view of Suzuki et al. " Development of a substation digital protection and control system using fiber-optic local area network ".

Barrick teaches a data acquisition system for substation protection having optical fiber communication. Barrick teaches that data samples such as current and voltages are taken at data acquisition modules (I/O modules), the samples are converted to digital values and sent over the optical fiber network to a data processing module (logic processor) in the control house. Barrick also discloses that the same data processing module can be connected to several data acquisition modules but not to an unlimited number due to timing constraints; Barrick also discloses use of optical

Art Unit: 2125

transmitters and receivers at the data acquisition modules; checking for faults and signaling a fault which can then start an isolation process. See page 315, first column, abstract; page 315, col.2, lines 18-35; fig.2 and its description; page 317, col. 1, lines 1-15; page 318, col. 2, lines 20-25; all of pages 319-320.

Barrick however does not specifically teach the use of protective relays controlled by the processing module

Suzuki et al. teaches substation protection using optical fiber communication, use of redundant systems; transmitting data such as current measurements, status information, trip information and commands for breakers. See the abstract; page 1668; and figs. 1,2 ;

It would have been obvious to one of ordinary skill in the art to modify Barrick in view of Suzuki and perform an isolation process by commanding opening/closing a breaker relay by the data processing module. Further in view of the teachings of Barrick and Suzuki it would have been obvious to one of ordinary skill in the art to modify Barrick and Suzuki to use multiple data processing modules to ease timing constraints as well as to provide system redundancy in case one system fails as by determining by comparing the redundant system operations.

Further it would have been obvious to one of ordinary skill in the art to modify Barrick in view of Suzuki to not only command the breaker relays but to sense relay status as feed back information to the logic processor to insure that the relay actually performed the command.

Art Unit: 2125

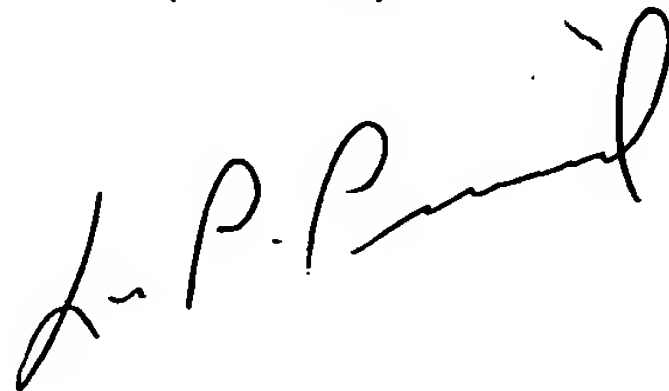
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Udren is of interest in the use of optical fibers (see page 22 and note the last paragraph in the first column); Gelbien et al. is of interest in the use of a processor and optical fiber communication (see col. 5, lines 32-43).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven R Garland whose telephone number is 571-272-3741. The examiner can normally be reached on Monday-Thursday from 6:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard, can be reached at (571)272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SRU
STEVEN GARLAND



LEO PICARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100